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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

RAHIMI, IRAJ A

ART UNIT PAPER NUMBER

2622

DATE MAILED: 03/16/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/640,663

Applicant(s)

YOSHIDA, TAKASHI

Examiner

(Iraj) Alan Rahimi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakanishi (US patent 6,114,837).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Nakanishi discloses a multifunction apparatus, which is so adapted that any device of a plurality of types can be selectively attached thereto, for executing control that differs depending upon the type of device attached, the apparatus comprising:

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transmitting means for transmitting a timing signal, which is for acquiring identifying information stored in an attached device, to the attached device (column 3, lines 50-59 and column 4, lines 7-43);

receiving means for receiving the identifying information that has been sent from the attached device in accordance with the timing signal (column 3, lines 50-59 and column 4, lines 7-43);

determination means for determining, with regard to a device of a specific type, whether specific data contained in the identifying information is indicative of a predetermined value (column 3, lines 50-59 and column 4, lines 7-43); and

control means for exercising control upon construing that the attached device is of the specific type in a case where the determination means has determined that the specific data is indicative of the predetermined value (column 3, lines 50-59 and column 4, lines 7-43).

Regarding claim 5, Nakanishi discloses the apparatus according to claim 1, wherein devices include a device having an information input function and a device having an information output function (column 5, lines 11-20). ROM, which can be used in a device to include device ID, has input and output function for accepting signals to detect device ID. Device ID is then output to multifunction apparatus.

Regarding claim 6, Nakanishi discloses the apparatus according to claim 1, wherein devices include a scanner unit 402, for reading a document image and a printhead cartridge 401 for outputting an image to a printing medium.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi in view of Suzuki (US patent 6,309,045).

Regarding claim 2, Nakanishi does not disclose the apparatus according to Claim 1, wherein said control means includes means for giving notification of the fact the attached device has not been electrically connected correctly if said determination means has determined that the specific data is not indicative of the predetermined value. Suzuki et al. discloses in column 6, lines 66-67 to column 7, lines 1-9 that print head has made an electrical connection. Nakanishi and Suzuki are analogous art because they are from the same field of endeavor that is printing art. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to use electrical connectivity as a more versatile method of ensuring proper insertion of the print head as opposed to mechanical methods.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi in view of Bueno et. (US patent 4,701,912).

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Regarding claim 3, Nakanishi does not disclose the apparatus according to claim 1, wherein the identifying information is digital information comprising a plurality of bits and is transmitted serially from the attached device, said specific data comprising two or more bits transmitted in succession. Bueno et al. (US patent 4,701,912) discloses the in claim 3 the limitation of the claim. Nakanishi and Bueno are analogous art because they are from the same field of endeavor that is data communication. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to use Bueno's invention to encode silences for providing an immediate and unambiguous identification.

6. Regarding claim 4, Bueno discloses the apparatus according to claim 3, wherein the predetermined value is; such that the values of the bits thereof differ alternately (claim 3).

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi in view of Fukazawa (US patent 5.936.740).

Regarding claim 7, Nakanishi discloses the apparatus according to claim 6, wherein the printhead cartridge 401 includes an ink-jet printhead for printing by discharging ink, but does not disclose an ink tank containing ink supplied to said printhead. Fukazawa discloses in column 10, lines 31-35 an ink tank. Nakanishi and Fukuazawa are analogous art because they are from the same field of endeavor that is printing art. Therefore, it would have been obvious to a person skilled in the art, at the

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time of invention to use the ink tank of Fukazawa for quick change over of the ink supply.

Regarding claim 8, Fukazawa discloses the apparatus according to claim 7, wherein said printhead discharges ink by utilizing thermal energy and has a thermal energy converter for generating thermal energy applied to the ink (column 10, lines 36-63).

Regarding claim 9-14, arguments analogous to those presented for claim 1-6, are respectively applicable.

Regarding claims 15 and 16, arguments analogous to those presented for claim 1, are applicable.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Iraj) Alan Rahimi whose telephone number is 703-306-3473. The examiner can normally be reached on Mon.-Fri. 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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March 7, 2004



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